

Adults learn to identify pain in babies cries: investigations from behavior to brain responses

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What are the neural correlates of identifying these cries in expert participants?

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Adults learn to identify pain in babies cries: investigations from behavior to brain responses Siloé Corvin^{1,2}, Isabelle Faillenot¹, David Reby², Nicolas Mathevon², Roland Peyron¹, Camille Fauchon¹

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Background: babies cries convey various information

These two types of information interact together

DIS Discomfort cry PAIN Pain cry Familiar baby Unknown baby 50% = chance levelfor cry recognition (discomfort or pain)







6. Pain cries were recognized slightly above chance, and less than discomfort cries. Participants showed on average 64% of correct recognition of cry's context (95% CI [61,67], 100% of the posterior distribution above the chance level). This was higher for discomfort cries (72% [70,75]) than for pain cries (56% [53,59]).

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both parents of young babies and professional caregivers, leading to no specific BOLD activation. However, acoustic roughness, specific to pain in cries, is linked to increased activity in **brain areas involved in empathy.**

